

June 29, 1995

**MEMORANDUM**

**GMP #72**

TO: District Directors  
Environmental Health  
Managers/Supervisors/Specialists  
Office of Environmental Health Staff

THROUGH: Donald J. Alexander, Director  
Division of Onsite Sewage and Water Services

FROM: Roger A. Cooley, Asst. Technical Services Chief  
Division of Onsite Sewage and Water Services

SUBJECT: Mass Drainfield Reviews  
Sewage - Onsite - Plan Review

Attached are a memorandum dated September 10, 1984, from H. W. Oglesby, defining mass drainfields and stating those items which should be addressed by the applicant, and a memorandum from Robert W. Hicks, providing the procedures for handling mass drainfield reviews. This GMP was developed to clarify and update the procedures for handling mass drainfield submittals.

As noted in the April 5, 1988-memorandum, a proposal for a mass drainfield must address water mounding beneath the drainfield area, nitrate loading contamination, and the operational reliability of the system. Procedures and formulas for calculating mounding and nitrates have been previously submitted to the district offices (see May 12, 1988-memorandum from David D. Effert). Additional copies of this information will be sent upon request.

Previously, mass drainfield reviews were submitted to the Division for review by Technical Services. However, since Technical Services is staffed at 50% of its previous level, it will no longer review mass drainfields. However, as noted previously the applicant must address those items noted in previous memoranda. As a minimum the applicant must provide calculations indicating that water mounding does not encroach into the separation distance, that nitrate concentrations in the ground water will not exceed 10 mg/L, and that the system is operationally reliable. We should inform the applicant that we

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recommend that the nitrate concentration not exceed 5 mg/L which is the groundwater anti-degradation policy for nitrates set by DEQ. The local health department may review the mass drainfield calculations. Once the local health department has accepted the mass drainfield calculations and issued a construction permit, they should notify the Division by memorandum indicating the name, county, and design flow of the mass drainfield.

The drainfields and any dilution areas used for reducing nitrate concentration must be designated on a plan sheet. No future drainfields shall be placed in the dilution area unless an equivalent nitrate loading drainfield is taken out of service in the same area. Therefore, this plan sheet should be placed in the applicant's file for future reviews. Because of the increased possibility of system failures and the complexity of these systems Technical Services recommends that formal plans be submitted for mass drainfields.

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